

In the claims

1. (withdrawn) A wafer fabrication system, comprising:

a power source coupled to a plasma system by circuitry;

wherein the endpoint for plasma etching is determined by measuring the voltage across an element of said circuitry.
2. (withdrawn) The system of Claim 1, wherein said element is a resistor.
3. (withdrawn) The system of Claim 1, wherein said circuitry includes impedance matching circuitry.
4. (withdrawn) The system of Claim 1, wherein said voltage is a DC voltage corresponding to a DC voltage within the plasma system where said plasma etching occurs.
5. (withdrawn) A wafer fabrication system, comprising:

a plasma system for etching a material within said plasma system;

circuitry coupled to said plasma system;

wherein said etching ends when a voltage across an element external to said plasma system undergoes a predetermined change.
- 6-11 (canceled)

12. (currently amended) A method of endpoint detection in plasma etching of a target layer of material, comprising the actions of:

providing a target layer of material of which not less than 90% of the target layer surface is covered with a mask;

etching the less than 10% open area of the target layer uncovered by the mask;

measuring voltage across a plasma system by measuring a voltage across an element that is external to said plasma system;

detecting a change of the voltage prior to the completion of the etching of the target layer of material; and

stopping etch when said voltage decreases a predetermined amount within a predetermined time.

13. (original) The method of Claim 12, wherein said element is a resistor.

14. (original) The method of Claim 12, wherein said voltage is a DC voltage.

- 15-18. (canceled)

19. (previously presented) The method of claim 12, wherein the element is part of an impedance matching network.

20. (new) The method of claim 12, wherein the not less than 90% of the target layer surface is not less than 96%.

21. (new) The method of claim 12, wherein the not less than 90% of the target layer surface is not less than 99%.